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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,452	12/17/2001	David C. Pelletier	2169.2001-000	2273

28534 7590 12/11/2006

MIRICK, O'CONNELL, DEMALLIE & LOUGEE
100 FRONT STREET
WORCESTER, MA 01608

EXAMINER	
SEDIGHIAN, REZA	

ART UNIT	PAPER NUMBER
2613	

DATE MAILED: 12/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,452	PELLETIER ET AL.	
	Examiner	Art Unit	
	M. R. Sedighian	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 October 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-27* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

1. This communication is responsive to applicant's amendments and Remarks filed 10/30/06. The amendments have been entered. Claims 1-27 are now pending.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-10, 12, and 14-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US Patent No: 6,115,159) in view of Kubo Kiyoshi et al. (Japanese Patent No: 57-173237), or Product Brochure, "PCI RCI System," Fiber Optic Extender for Camera Link or LVDS (AIA) C, and in further view of Hurwitz (US Patent No: 5,568,205), or Maruichi et al. (US Patent No: 5,469,211).

Regarding claims 1, 14, and 18, Baker teaches a transceiver (24, figs. 2, 3) for providing an interface between a camera (12, fig. 2) and a fiber optic cable (30, fig. 2), the transceiver comprising: a transmitter (118, fig. 3) for coupling between the camera and the fiber optic cable and adapted for converting an electrical information input signal (CA, fig. 2) received from the camera (12, fig. 2) to an optical output signal (OCA, fig. 2 and col. 3, lines 25-48), wherein the electrical information input signal include one or more baseband television signals (col. 1, lines 28-33, col. 3, lines 20-23, 55-58); a receiver (122, fig. 3) for coupling between the fiber optic cable and the camera and adapted for converting an optical input signal (OCU, fig. 2) received from the fiber cable (30, fig. 2) to an electrical information output signal (CU, fig. 2), wherein the electrical information output signal includes one or more baseband television signals

(col. 3, lines 55-56); a housing for holding the transmitter and receiver (it is known and obvious that the transmitter and receiver are housed within a housing for reasons of safety and protection). Baker differs from the claimed invention in that Baker does not specifically disclose a connector for coupling the fiber to the transceiver. However, it would have been obvious to a person of ordinary skill in the art that fiber 30 can be connected to transceiver 24 through a connector to further provide a proper coupling for further transmission of the signals. For example, Kubo Kiyoshi teaches a camera (16, fig. 3) that is coupled to an optical transmitter (18, fig. 3) by an optical fiber (19, fig. 3) through an optical connector (20, fig. 3). Likewise, the Product Brochure, "PCI RCI System" Fiber Optic Extender for Camera Link or LVDS, describes (see page 2) about an optical fiber cable that is connected through a connector to an optical transceiver (the RCI module) and a CCD camera (see page 3, fiber optic cables and transceivers). As it is taught by Kubo Kiyoshi and the Product Brochure, "PCI RCI System", it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a connector for coupling the optical fiber 30 of Baker to transceivers 22 or 24, as such connectors are taught by Kubo Kiyoshi and Product Brochure, "PCI RCI System", in order to provide a proper coupling and precise transmission of optical signal. The modified camera transmission system of Baker, Kubo Kiyoshi, and Product Brochure, "PCI RCI System" further differs from the claimed invention in that Baker, Kubo Kiyoshi, and Product Brochure, "PCI RCI System" do not disclose the housing (or the transceiver) is adapted for mounting to the camera, and wherein the transceiver receives DC power from at least one of the camera or a power source coupled to the camera. Hurwitz discloses a transmitter housing (19, fig. 1) can be mounted (col. 6, lines 11-20) to a camera (17, fig. 1), wherein the transmitter (19, fig. 1) receives DC power from a power

source (18, fig. 1) that is coupled to the transmitter and to the camera (col. 6, lines 11-27). Likewise, Maruichi teaches a remote control receiver (10, fig. 1) that can be mounted to a camera (col. 2, lines 51-67), wherein the receiver receives DC power from a power source (20, fig. 1) that is coupled to the camera (col. 3, lines 47-67, col. 4, lines 1-8). As it is taught by Hurwitz and Maruichi, it would have been obvious to an artisan at the time of invention to mount the transceiver 24 of Baker to camera unit 12 and to further provide a DC power source that can be coupled to the camera and to the transceiver, as such apparatuses taught by Hurwitz and Maruichi, to provide power for the transceiver and to have a movable camera mounted wireless audio/video transmission system.

Regarding claims 2, 15, and 19, as to a housing that includes a first plate on a first side for mounting the housing to the camera and a second plate on a second side adapted for mounting the housing to a power source, Hurwitz discloses a camera mounted wireless audio/video transmitter system (17, 18, 19, fig. 1 and col. 6, lines 11-27), wherein a customized mounting plate is provided (col. 6, lines 15-17) within a transmitter (19, fig. 1) to make a power source (18, fig. 1) integrable with the camera (17, fig. 1). Likewise, Maruichi discloses a remote control receiver housing (10, fig. 1) with first plate on the first side of the housing (17, 17a, 10c, 10d, 17b, fig. 1) and a second plate on a second side (10a, 10b, fig. 1) adapted for mounting (col. 2, lines 51-67, col. 3, lines 1-8) the housing to a power source (20, fig. 1) and to the camera (1, fig. 1). As it is taught by Hurwitz and Maruichi, it would have been obvious to an artisan at the time of invention to provide a transceiver housing with a first and second plates, for the transceiver housing 24 of Baker, to connect the transceiver module 24 to the camera and to a

power source to further provide a movable camera mounted wireless audio/video transmission system.

Regarding claim 3, Baker teaches the electrical information input signal includes a video signal (col. 4, line 58).

Regarding claim 4, Baker teaches the electrical information input signal includes an audio signal (col. 3, lines 20-22).

Regarding claim 5, Baker teaches the electrical information input signal includes data signal (col. 4, line 58).

Regarding claim 6, Baker teaches the electrical information output signal includes a video signal (col. 4, line 58).

Regarding claim 7, Baker teaches the electrical information output signal includes an audio signal (col. 3, lines 20-22).

Regarding claim 8, Baker teaches the electrical information output signal includes data signal (col. 4, line 58).

Regarding claim 9, Baker further teaches a wave division multiplexer (120, fig. 3) adapted for coupling the optical output signal from the transmitter (118, fig. 3) to the fiber (28, 30, fig. 2) and for coupling (120, fig. 3) the optical input signal from the fiber to the receiver (122, fig. 3).

Regarding claim 10, Baker further teaches the electrical information input signal includes plural information signals received from the camera (col. 3, lines 55-58) and wherein the transmitter includes a multiplexer for multiplexing the plural camera information signals to a multiplexed electrical input signal (col. 3, lines 65-67, col. 4, lines 1-26) and an electro-optical

converter (118, fig. 3) for converting the multiplexed electrical input signal to an optical output signal (col. 4, lines 24-30).

Regarding claim 12, Baker further teaches the receiver includes an optical to electrical converter (122, fig. 3) that converts the optical input signal to a multiplexed electrical signal and a demultiplexer for demultiplexing the multiplexed electrical signal to plural remote information signals (col. 4, lines 50-67).

Regarding claim 16, Hurwitz teaches the power can be passed from the power source to the camera through the housing and is tapped off to supply power to the apparatus (col. 6, lines 17-26).

Regarding claim 17, Baker teaches a receiver (122, fig. 3) for converting an optical input signal ($\lambda 2$, fig. 3) to electrical information output signal (col. 4, lines 35-37, 50-58) and wherein the housing is further adapted for holding the receiver (it is known and obvious that the receiver 122 can be housed within a housing for reasons of safety and protection).

Regarding claim 20, Baker further teaches the camera optical transceiver (24, figs. 2, 3) comprises: a transmitter (118, fig. 3) for coupling between a camera (12, fig. 2) and the fiber cable (30, fig. 2) and adapted for converting an electrical input information signal (CA, figs. 2, 3) received from the camera to the downstream optical signal (col. 3, lines 49-67, col. 4, lines 1-33); and a receiver (122, fig. 3) for coupling between the fiber and the camera and adapted for converting the upstream optical signal to an electric information output signal (col. 4, lines 50-59).

Regarding claim 21, Baker further teaches the electrical information input and output signals include video signals (col. 4, line 58).

Regarding claim 22, Baker further teaches the electrical information input and output signals include audio signals (col. 3, line 20-22).

Regarding claim 23, Baker further teaches the electrical information input and output signals include data signals (col. 4, line 58).

Regarding claim 24, Baker further teaches the remote optical transceiver (22, figs. 2, 4) comprises: a transmitter (218, fig. 4) for coupling between a remote camera control unit (10, fig. 2) and the fiber (30, fig. 2) and adapted for converting an electrical information input signal (CU, figs. 2, 4) received from the remote camera control unit (10, fig. 2) to the upstream optical signal (OCU, figs. 2, 4); and a receiver (222, fig. 4) for coupling between the fiber cable (30, fig. 2) and the camera control unit (10, fig. 2) and adapted for converting the downstream optical signal received from the fiber to an electrical information output signal (col. 5, lines 53-67, col. 6, lines 1-6).

Regarding claim 25, Baker teaches the optical transceiver (24, fig. 2) include a connector cable (18A, 14B, fig. 2) for electrically connecting the optical transceiver (24, fig. 2) to a camera (12, fig. 2) and wherein the optical transceiver is adapted to select a camera specific data signal type responsive to a connector cable option (col. 3, lines 25-35 and CA, fig. 2).

4. Claims 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US Patent No: 6,115,159) in view of Kubo Kiyoshi et al. (Japanese Patent No: 57-173237) and in further view Wakui (US Patent No: 6,262,767 B1).

Regarding claim 26, Baker teaches a transceiver (22, fig. 2) for providing an interface between a video production facility (10, fig. 2) and a fiber optic cable (30, fig. 2), the transceiver

disposed within a housing (it is known and obvious that the transceiver 22 can be housed within a housing for reasons of safety and protection) and comprising: a transmitter (218, fig. 4) for coupling between the video production facility and the fiber optic cable and adapted for converting an electrical information input signal received from the video production facility to an optical output signal (col. 5, lines 45-50); a receiver (222, fig. 4) for coupling between the fiber optic cable and the video production facility and adapted for converting an optical input signal received from the fiber cable to an electrical information output signal (col. 5, lines 53-60), wherein the electrical information input signal includes plural information signals received from the video production facility (col. 5, line 42) and wherein the transmitter includes a multiplexer for multiplexing the plural information signals to a multiplexed electrical input signal (col. 5, lines 45-48) and electrical to optical converter for converting the multiplexed electrical input signal to the optical output signal (col. 5, lines 47-48). Baker differs from the claimed invention in that Baker does not specifically disclose a connector for coupling the fiber optic cable directly to the transceiver. Kubo Kiyoshi teaches a camera (16, fig. 3) that is coupled to an optical transmitter (18, fig. 3) and an optical fiber (19, fig. 3) through an optical connector (20, fig. 3). As it is taught by Kubo Kiyoshi, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate a connector for coupling the optical fiber of Baker to the transceiver, as such connectors are taught by Kubo Kiyoshi, in order to provide a proper coupling and precise transmission of optical signal. The modified camera transmission system of Baker and Kubo Kiyoshi further differs from the claimed invention in that Baker and Kubo Kiyoshi do not specifically disclose the transceiver receives DC power from at least one of a power source disposed within the housing or a power source external to the housing. However,

Baker in the background section of his invention discloses providing DC power from the CCU to the camera (col. 1, lines 10-13, 18-20). Wakui discloses a digital camera (2, fig. 2) with infrared transmitter and receiver (23, 24, fig. 5) and a power supply circuit (33, fig. 5) for providing power (col. 5, lines 15-18). As it is disclosed by Baker and taught by Wakui, it would have been obvious to an artisan at the time of invention to provide a DC power source within the housing of the transceiver 22 of Baker to also provide power for the transceiver.

Regarding claim 27, Baker teaches the receiver includes an optical to electrical converter (222, fig. 4) that converts the optical input signal to a multiplexed electrical signal and a demultiplexer for demultiplexing the multiplexed electrical signal to plural remote information signals (col. 5, lines 57-65).

5. Claims 11 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker (US Patent No: 6,115,159) in view of Kubo Kiyoshi et al. (Japanese Patent No: 57-173237), or Product Brochure, "PCI RCI System," Fiber Optic Extender for Camera Link or LVDS (AIA) C, and in view of Hurwitz (US Patent No: 5,568,205), or Maruichi et al. (US Patent No: 5,469,211) and in further view of Nagata et al. (US Patent No: 6,947,092 B1).

Regarding claims 11 and 13, the combination of Baker, Kubo Kiyoshi, Product Brochure, "PCI RCI System", and Hurwitz or Maruichi differs from the claimed invention in that Baker, Kubo Kiyoshi, Product Brochure, "PCI RCI System", and Hurwitz or Maruichi do not specifically disclose analog-to-digital converter or digital-to-analog converter circuitries for converting the signals. It is well known to incorporate analog-to-digital converter or digital-to-analog converter circuitries in the transmitter or receiver modules to convert the signal from one

form to another. For example, Nagata discloses a camera interface board (9, fig. 2) that includes an analog-to-digital converter (14, fig. 2) and a digital-to-analog converter (15, fig. 2). Therefore, it would have been obvious to a person of ordinary skill in the art at the time of invention to incorporate analog to digital or digital to analog converter circuitries such as the ones of Nagata for the transceiver or the interface unit of Baker to convert the signal from one form to another for further signal processing or measurements.

6. Applicant's arguments filed 10/30/06 have been fully considered but they are not persuasive.

Remark states Baker does not disclose processing of baseband television signals, and instead process conventional television signals. Baker in the background section of his invention discloses a triaxial adapter demodulates the composite signal at either of the receiving ends of the triaxial cable into the respective baseband signals, and wherein the triaxial adapter may be contained within the camera and/or CCU ends, or may be separate units that attach to the camera and/or CCU ends (col. 1, lines 28-33). Accordingly, the camera transmission system of Baker can process and transmit baseband television signals.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. R. Sedighian whose telephone number is (571) 272-3034. The examiner can normally be reached on M-F (from 9 AM to 5 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

M. R. SEDIGHIAN
PRIMARY EXAMINER